

MIKHAL'YANTS, A.A.

Acute appendicitis in elderly and senile patients; according to material of a district hospital for a five-year period. (MIA 16:9)
Sov.Med. 27 no.7:81-84 J1'63.

1. Iz khirurgicheskogo otdeleniya (zav. A.A. Mikhal'yants)
Dzhabkoyskoy rayonnoy bol'nitsy (glavnyy vrach S.L.Tseytlin),
Krymskaya oblast'.
(APPENDICITIS—CASES, CLINICAL REPORTS, STATISTICS)
(GERIATRICS)

MIKHAL'YANTS, A.A.

Repeated perforation of a duodenal ulcer. Vrach. delo
no.8:125 Ag'63. (MIRA 16:9)

1. Khirurgicheskoye otdeleniye (zav. - A.A.Mikhal'yants)
Dzhankoysskoy rayonnoy bol'nitsy Krymskoy oblasti.
(DUODENUM—ULCERS)

MIKHAL'YANTS, A.A.

Surgical treatment of tuberculosis of the stomach and duodenum. Probl. tub. 41 no.5:38-42 '63. (MIRA 17:1)

1. Iz khirurgicheskogo otdeleniya (zav. A.A. Mikhal'yants) Dzhankovskoy rayonnoy bol'nitsy (glavnyy vrach S.L. TSeytlin) Krymskoy oblasti.

MIKHAL'YANTS, A.A.

Perforated ulcer of the stomach and duodenum in adolescents.
Pediatria 42 no.8:85-86 Ag'83 (MIRA 17:4)

1. Iz khirurgicheskogo otdeleniya (zav. A.A. Mikhal'yants)
Dzhankovskoy rayonnoy bol'nitsy (glavnyy vrach S.L. Tseytlin)
Krymskoy oblasti.

MIKHAL'YANTS, A.A.

Diagnosis of duodenal tuberculosis. Vest. khir. 93 no.8:100

Ag '64.

(MIRA 18:7)

1. Iz khirurgicheskogo otdeleniya (zav. - A.A.Mikhal'yants)
Dshankoyskoy rayonnoy bol'nitsy (glavnyy vrach - S.L.Tseytlin)
Krymskoy oblasti.

ZAZERSKIY, K.N.; MIKHALYCHEV, I.M.

New synthetic building materials. Bul. tekhn. inform. 4 no. 6:27-
28 Je '58. (MIRA 11:7)

(Plastics)

MIKHALYCHEV, I.M.

Five-story apartment house built of precast panels. Biul.
tekhn.inform. 4 no.9:27-28 S '58. (MIRA 11:10)
(Leningrad--Apartment houses) (Concrete slabs)

ACC NR: AT6036496

SOURCE CODE: UR/0000/66/000/000/0062/0063 /

AUTHOR: Benevolenskaya, T. V.; Boykova, O. I.; ~~Shchegolev, A. A.~~ Mikhalylovskiy, G. P.; Savirov, A. A.

ORG: none

TITLE: Use of dosed physical exercise in diagnosing changes in the functional state of the cardiovascular system [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 62-63

TOPIC TAGS: space medicine, diagnostic medicine, cardiovascular system, cosmonaut. training, physical exercise, cardiology

ABSTRACT: Exercise tests are valuable for examination of cosmonauts because they uncover latent pathological changes in cardiovascular function. Many of the subjects of this study were unaccustomed to sport or exercise, so it was necessary to demonstrate their adaptability to physical exercise. Physical exercise consisted of a single and double Master test — twenty deep-knee-bends in 30 sec-- and work on a bicycle ergometer. Master's test is valuable because it permits dosing the exercise depending on the subjects' age and weight and makes evaluation of myocardial

Card 1/3

ACC NR: AT6036496

function during exercise possible. However, electrocardiograms cannot be recorded in the usual manner during this test. For this reason the supplementary test on the bicycle ergometer was used. The optimum physical exercise of 1000 kg-m per min was performed for 5 min. Tests (160 in all) were administered in the morning after preliminary training the night before. EKG's, phonocardiograms, sphygmograms, and blood pressure readings were taken before and after the test, and at one-minute intervals during the test.

Experimental results showed the following physiological shifts in healthy people: 1) pulse rate increased 100—120% from initial levels, 2) systolic pressure increased to 200 mm, 3) diastolic pressure varied up to 10 mm in either direction, 4) the T-spike of the EKG decreased and subsequently increased, and 5) the ST interval underwent a slight shift. Decreases in the length of the isometric contraction pause, the period of expulsion, and the mechanical system were noted, together with increases in the intrasystolic index and the rate of increase in intraventricular pressure. In addition, the percentage of oxygenation changed slightly. In some subjects there were indications of insufficient cardiac-muscle, nourishment, appearing chiefly in the aftereffect

Card 2/3

ACC NR: AT6036496

period: the ST interval shifted, some two-phase or inverted T-spikes were noted, and migration of rhythm occurred.

Tests on the bicycle ergometer also demonstrated the insufficient adaptability of the cardiovascular system to physical exercise: 1) pulse rate increased 200%, 2) diastolic pressure increased 30 mm, 3) a long aftereffect period was noted, and 4) extrasystole occurred. In some subjects the isometric contraction phase increased. The T-spike of the EKG changed slightly.

Inclusion of these tests in the regular examination of aviation personnel and cosmonauts is recommended because of the possibility of dosing exercises and recording a number of electrophysiological parameters during exercise, but also because of the large percentage of pathological cardiovascular changes uncovered in apparently healthy people during work on the ergometer. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06, 05 / SUBM DATE: 00May66

Card 3/3

ANUCHIN, P.I.; FERGUS, A.I.; MIKHAYUK, G.F.

Corrosion resistance of various copper types in acetic acid solutions. Gidroliz. i lesokhim. 18 no. 3:12-14 '65.

(MIRA 18:5)

1. Tsentral'nyy nauchno-issledovatel'skiy i proyektnyy institut lesokhimicheskoy promyshlennosti.

ALYUK
BARANNIK, P.I., prof.; MIKHALYUK, I.A.; TSVETKOVA, I.N.; LYASHEVSKAYA, V.F.

Hygienic aspects of natural lighting of auditoriums of Kiev. Vrach.
delo supplement '57:110 (MIRA 11:3)

1. Kafedra obshchey gigiyeny (zav.-prof. P.I.Barannik) Kiyevskogo
meditsinskogo instituta.
(KIEV--LIGHTING) (AUDITORIUMS)

BARANIK, P.I., prof. ZANOZDRA, S.F. [deceased], MIKHALYUK, I.A., TSVETKOVA,
I.N.,

The sanitation picture of well water supply for villages in Dymir
District. Vrach.delo no.6: 647 Je '58 (MIRA 11:?)

1. Kafedra obshchey gigiyeny Kiyevskogo meditsinskogo instituta.
(DYMER DISTRICT--WATER SUPPLY, RURAL)

MIKHALYUK, I.A.

Escherichia coli index and fungi in water at various levels of
pollution [with summary in English]. Mikrobiologiya 27 no.6:
724-726 N-D '58. (MIRA 12:1)

1. Kiyevskiy meditsinskiy institut.

(WATER POLLUTION,

E. coli & fungi in water in various levels of
pollution (Rus))

(ESCHERICHIA COLI,

in water, relation to degree of pollution (Rus))

(FUNGI

same)

MIKHALYUK, I.A., kandidat meditsinskikh nauk.

Changes in the results of bacteriological analysis of water in
relation to the conditions and time required for shipping the samples.
Vrach. delo no.3:287 Mr '57 (MLRA 10:5)

1. Kafedra obshchey gikiyeny (zav.-prof. P.I. Barannik) Kiyevskogo
meditsinskogo instituta.
(WATER--ANALYSIS)

MIKHALYUK, I.A.

Sanitary evaluation of the oxidizability of water with a pronounced
humic content. Gig. i san. 24 no. 0:28 S '59. (MIRA 13:1)

1. Iz kafedry obshchey gigiyeny Kiyevskogo meditsinskogo instituta.
(WATER--POLLUTION)

MIKHALYUK, I.A.

Method for the determination of cobalt in water. Lab.delo 6
no.3:26-27 My-Je '60. (MIRA 13:7)

1. Kafedra obshchey gigiyeny (zav. - prof. P.I. Barannik)
Kiyevskogo meditsinskogo instituta.
(COBALT--ANALYSIS) (COLORIMETRY)

MIKHALYUK, I.A., kand.med.nauk

Specific oxidizability as a sanitary index of the quality of
water. Gig.i san. 25 no.1:95-97 Ja '60. (MIRA 13:5)

1. Iz kafedry obshchey gigiyeny Kiyevskogo meditsinskogo instituta.
(WATER SUPPLY)

BARANNIK, P.I., prof.; MIKHALYUK, I.A., dotsent; MNATSAKANYAN, R.P., assistant;
TSVETKOVA, I.N.; YATSULA, G.S.

Zinc, manganese, cobalt, and iodine in potable artesian water in Kiev.
Gig. i san. 26 no.4:95-97 Ap '61. (MIRA 15:5)

1. Iz kafedry obshchey gigiyeny Kiyevskogo meditsinskogo instituta.
(KIEV--WATER--ANALYSIS)

BEYLIEN, S.M., inzh., N. S. YUK, I.G., inzh.; RIFMAN, D.M., inzh.

Plastin pirone. Mashinostroenie no.2:10-12 Mr-Ar '65.
(MIRA 18:6)

LARINA, M.M.; MIKHALYUK, . . .

Secondary mineral isolations in the Devonian and Lower and Middle Carboniferous in the deposits of Kuybyshev and Orenburg Provinces. Trudy Giprovoostoknefti no.5:41-46 '62. (MIRA 16:8)

(Kuybyshev Province--Petrology)
(Orenburg Province--Petrology)

MIKHALIYUK, N., mashinist ugol'nykh mel'nits.

Using electric heating in making soluble glass from silicate blocks. Suggested by N. Mikhaliuk. *Rats. i izobr. predl. v stroi.* no. 14:71-73 '60. (MIRA 13:6)

1. Zdolbunovskiy tsementnyy zavod L'vovskogo sovnarkhoza, L'vov, ul. Pervogo Maya, 17.
(Electric heating) (Soluble glass)

KUZNETSOV, G.I., inzh.; MIKHALYUK, P.P., inzh.

Loosening coal massives by water infusion. Bezop. truda v prom. 4
no. 5:8-10 My '60. (MIRA 14:5)
(Selidovka—Coal mines and mining)

MIKHALIUK, B.Y.

Joint session on the problem "Bentonites of the Ukrainian S.S.R.
and their industrial use." Visnyk AN URSR 25 no.11:70-72 N '54.
(Ukraine--Bentonite) (MLRA 8:2)

OYCHARENKO, F.D.; MIKHALYUK, R.V.

Elastoplastic characteristics of diluted and concentrated bentonite suspensions. Bent. gliny Ukr. no.1:53-62 '55. (MIRA 12:12)

1. Institut obshchey i neorganicheskoy khimii AN USSR.
(Bentonite)

... .., Cand. Sci. -- "St.
... .."
... ..

MIKHALYUK, R.V.

Organophilic bentonites; brief review of literature. Bent. gliny
Ukr. no.2:205 '58. (MIRA 12:12)

1.Kiyevskiy tekhnologicheskii institut pishchevoy promyshlennosti.
(Bibliography--Bentonite)

AUTHORS: Kurilenko, O. D., Mikhalyuk, R. V. SOV/156-58-3-11/52

TITLE: The Adsorption of Steam on Aminobentonite Complexes (Adsorbtsiya parov vody na amino-bentonitovykh kompleksakh)

PERIODICAL: Nauchnyye doklady vysshey shkoly, Khimiya i khimicheskaya tekhnologiya, 1958, Nr 3, pp. 447 - 451 (USSR)

ABSTRACT: The adsorption of steam at aminobentonite complexes was measured; it was found that at all partial pressures a series is obtained. It corresponds to the decrease of the hydrophilic properties of the aminobentonite complexes, which develops parallel to the increase of the organic cation, or the substitution degree of the exchange complex, respectively. It was shown that the equation of Brunauer, Emmet and Teller (Ref 4) may be used for the isothermal lines of the adsorption of steam on aminobentonite complexes within the range of the partial pressures $P/P_0 = 0,05 - 0,35$. The amount of water adsorbed on the mono-layer was calculated. These quantities are reduced when the hydrophilic character of the surface of bentonite decreases. Bentonite from the Kavkaz (askangel') (Caucasus) and the Ukraine (pyzhevskiy) was investigated. Diagrams 1 and 2 give the

Card 1/2

The Adsorption of Steam on Aminobentonite Complexes

SOV/156-58-3-11/52

adsorption isothermal lines at 20° after various types of pre-treatment. Tables 1 and 2 give the experimental results. They agree well with the equations of Brunauer, Emmet and Teller (Diagram 3). The values for the adsorption constant a_m were calculated for the various bentonite complexes (Table 3). There are 3 figures, 3 tables, and 6 references, 1 of which is Soviet.

ASSOCIATION:

Kafedra fizicheskoy i kolloidnoy khimii Kiyevskogo tekhnologicheskogo instituta pishchevoy promyshlennosti (Chair of Physical and Colloidal Chemistry of the Kiyev Technological Institute for the Food Industry)

SUBMITTED: December 2, 1957

Card 2/2

21-58-7-15/27

AUTHORS: Ovcharenko, F.D., Corresponding Member of the AS UkrSSR, Mikhal'yuk, R.V. and Kurilenko, G.D.

TITLE: Ion Exchange and Hydrophilia of Bentonites (Ionnij obmen i gidrofil'nost' bentonitov)

PERIODICAL: Dopovidi Akademii nauk Ukrain'skoi SSR, 1958, Nr 7, pp 747-751 (1958)

ABSTRACT: Several investigators have studied adsorption capacities of various types of ground, as e.g. Dumanskiy (Ref. 2), Bykov (Ref. 3 and 7), Goncharov (Ref. 10) and many foreign ones. The authors performed a series of experiments on wetting bentonites with water and then measuring the heat and water adsorption. It was established that at first the adsorption of water occurs in the more active sites, i.e. corresponds to the greater energetic effects. The entropy of water adsorption considerably reduces, which indicates that the water molecules are there in a most orderly state. The authors compared the results of their experiments with their calculations of pure adsorption heats, obtained from the values of the energy constant C derived from the Lamb and Coolidge (Ref 13) theory, and found that the results of the adsorption and calorimetric measurements agree well. On the basis of adsorption and calorimetric

Card 1/2

Ion Exchange and Hydrophilia of Bentonites

21-58-7-15127

data, some thermodynamic functions of the bentonite-water system were determined. The character of the changes in some thermodynamical properties of this system warrants a presumption that the bentonite surface is energetically non-homogeneous. There are 5 graphs, 1 table and 12 references, 6 of which are Soviet, and 7 American

ASSOCIATIONS: Institut obshchey i neorganicheskoy khimii AN UkrSSR (Institute of General and Inorganic Chemistry of the AS Ukr UR, Kiyevskiy tekhnologicheskii institut pishchevoy promyshlennosti (Kiyev Technological Institute of the Food Industry)

SUBMITTED: March 14, 1958

NOTE: Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration.

1. Bentonite-water systems--Adsorptive properties
2. Bentonite-water systems--Thermodynamic properties
3. Heat--Adsorption
4. Water--Adsorption

Card 2/2

5(

SOV '69-31-2-12/22

AUTHOR.: Kurilenko, G.D. and Mikhalyuk, R.V.

TITLE: The Adsorption of Aliphatic Amines on Bentonite from Aqueous Solutions (Adsorbtsiya alifaticheskikh aminov na bentonite iz vodnykh rastvorov)

PERIODICAL: Kolloidnyy zhurnal, 1969, Nr 2, pp 195-199 (USSR)

ABSTRACT: This is the report of an investigation carried out to study the adsorption of the higher aliphatic amines on bentonites in quantities exceeding by several times the exchange capacity of the latter. The investigation established two types of adsorption - irreversible ionic and reversible physical adsorption. It was further ascertained that an amine adsorption on sodium bentonite exceeds by several times the adsorption on calcium bentonite, which partly is explained by the fact that the first disperses in water to a far higher degree than the second. Another possible factor of this phenomenon is the different solidity of the linkage of sodium and calcium ions with the montmorillonite surface, i.e. the exchange of the organic cation with Na⁺ is more easily per-

Card 1/2

SOV/69-01-2-12/22

The Adsorption of Aliphatic Amines on Bentonite from Aqueous Solutions

formed than with Ca^{2+} . When measuring the heat caused by wetting the dried amine-bentonite complexes of various amine-clay ratios with water, the authors observed that in this concentration area (80-100 mg-equiv) the hydrophilic properties are reduced to a minimum. The following scientists are mentioned in the article: R. Grim [W. H.] Slabaugh (Sleybo), and P.A. Rebinder. There are 5 graphs and 15 references, 12 of which are English and 3 Soviet.

ASSOCIATION: Kiyevskiy tekhnologicheskii institut pishchevoy promyshlennosti (Kiyev Technological Institute of the Food Industry)

SUBMITTED: December 4, 1957

Card 2/2

5 (4)

AUTHORS: Mikhalyuk, R. V., Kurilenko, O. D. SOV/153-2-2-9/31

TITLE: Investigation of Lyophilically Aminated Bentonites
(Issledovaniye liofil'nosti aminirovannykh bentonitov)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya
tekhnologiya, 1959, Vol 2, Nr 2, pp 196 - 199 (USSR)

ABSTRACT: Bentonite can be looked upon as an inorganic high polymer. It disperses itself in water and has ion exchanging properties. As is known, exchange cations have an influence on the hydrophilic nature of bentonite (Refs 2-8). The influence of the organic cations on the molecular nature of the bentonite surface has not been investigated sufficiently (Refs 9-11). The present article deals with the examination of the originally hydrophilic bentonite surface dependent on the nature of the organic exchange cations (amines) and on their concentration. A 2% water dispersion of Askangel' (sodium bentonite, deposit of Tsikhis-Ubana, Gruzinskaya SSR) was prepared for the investigation. The amines were first transferred into HCl salts and dissolved in water. Amination was carried out in the mentioned dispersions. The authors found that the minimum hydrophilic nature of the bentonite surface lies within 100 mg-equ/100 g. This rela-

Card 1/4

Investigation of Lyophilically Aminated Bentonites SOV/153-2-2-9/31

tion therefore served as a fundamental. After the diluted amino salt solutions in water had been added to the dispersion, a quick flocculation occurred. Table 1 gives the figures of the heat of wetting Askangel' with water in which the cation is replaced by various inorganic and organic cations. This shows that these heats were considerably reduced after treating Askangel' with various organic cations. The hydrophilic nature of bentonite is apparently least reduced by the 1-charge cation which is smallest in size and most compact. The tri-isoamyl amine ion reduces the mentioned heat much more. The greatest reduction of the hydrophilic nature of natural bentonite is caused by cations of the salts of quaternarily dispersed ammonium. Thus the branching of carbon chains plays a role, as well as their length. The analysis given in table 1 leads to the conclusion that the cations form a sequence according to the degree of their influence on the hydrophilic nature of the bentonite surface: $Ca \gg H \gg Na \gg$ large organic cations. From this table the fact results that no continuous monolayer seems to develop on the bentonite surface, at least not by the amines used there. The information won in connection with the heat of wetting also proved right by measuring the absorbed amount of water, on the

Card 2/4

Investigation of Lyophilically Aminated Bentonites SOV/153-2-2-9/31

basis of the varied tensions of water steam (Table 2). Figure 1 shows the adsorption therms for bentonite, the cation of which was replaced by organic and inorganic cations. The organic montmorillonite derivatives on the whole, are less hydrophilic than the inorganic ones. Table 3 shows the measuring results of the adsorption of benzene vapor with aminated bentonites. These statements show that the amount of the absorbed benzene increases with an increase of the hydrocarbon radical which is a component of the amine added to bentonite. Figure 2 shows the measuring results of the adsorption isotherms of benzene vapor (at 20°) on specimens of natural Askangel' and Askangel' dispersed by cations of higher amines. This shows that the oleophilic nature of bentonite is increased by the latter substitute. The hysteresis takes place in the whole sphere of the relative pressure. The adsorption of benzene vapor proves the increased oleophilic nature of aminated bentonites. The isotherms shown in figures 1 and 2 change places, so to speak: natural bentonite which swells in water, does not swell in benzene, and aminated bentonite swells in benzene, although it does not swell in water. There are 2 figures, 3 tables, and 15 references, 7 of

Card 3/4

Investigation of Lyophilically Aminated Bentonites SOV/153-2-2-9/31

which are Soviet.

ASSOCIATION: Kiyevskiy tekhnologicheskii institut pishchevoy promyshlennosti;
Kafedra fizicheskoy i kolloidnoy khimii (Kiyev Technological
Institute of the Food Industry; Chair of Physical and Colloid
Chemistry)

SUBMITTED: February 15, 1958

Card 4/4

SOV/153--2-3--10/29

5(4)

AUTHORS: Mikhalyuk, R. V. Kurilenko O. D.

TITLE: Sedimentation Volumes of Aminated Bentonites in Organic Liquids

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya. 1959 Vol 2 Nr 3 pp 366-368 (USSR)

ABSTRACT: The object of the present paper was to investigate the capability of swelling of aminated montmorillonite in organic liquids. In this case intermicellar swelling was concerned which may be measured by the increase of the total volume. The swelling of montmorillonite which was aminated with dimethyl decyl octadecylammonium chloride in water, ethyl alcohol, isoamy. alcohol, aniline, ethyl acetate, ethyl ether, acetone, benzene and nitrobenzene was measured (Table 1). The capability of swelling and heat of wetting of the alcohols depend on the length of the chain (Table 2 Figs 1 and 2). With increasing chain length, the oleophilic properties increase. In a further test series montmorillonite aminated with trimethyl octadecylamine (TMO) was used. benzene and alcohol served as solvents (Table 3). Montmorillonite samples with

Card 1/2

Sedimentation Volumes of Aminated Bentonites in Organic Liquids SOV/153-2 3-10/29

different occupation with TMO were investigated. The maximum of swelling is at an occupation of approximately 100 mg equivalent/100 g. It was found that in a series of organic liquids especially in nitrobenzene, thixotropic gels were formed at certain concentrations. There are 2 figures, 3 tables, and 4 references.

ASSOCIATION: Kiyevskiy tekhnologicheskii institut pishchevoy promyshlennosti - Kafedra fizicheskoy i kolloidnoy khimii (Kiyev Technological Institute of Food Industry - Chair of Physical and Colloidal Chemistry)

SUBMITTED: February 15 1958

Card 2/2

OVCHARENKO, F.D., otv.red.; KURILENKO, O.D., doktor khim.nauk, red.;
NEZMARK, I.Ye., doktor khim.nauk, red.; ROYTER, V.A., red.;
MIKHALYUK, R.V., kand.khim.nauk, red.; MEL'NIK, A.F., red.
izd-va; MATVEYCHUK, A.A., tekhn.red.

[Natural mineral sorbents; proceedings of the conference held
June 9-12, 1958 in Kiev] Prirodnye mineral'nye sorbenty;
trudy soveshchaniia, sostoiavshegosia 9-12 iunია 1958 goda
v g. Kieve.. Kiev, 1960. 370 p. (MIRA 13:7)

1. Soveshchaniye po prirodnykh mineral'nykh sorbentam, Kiev, 1958.
2. Chleny-korrespondenty AN USSR (for Ovcharenko, Royter).
(Sorbents)

KURILENKO, O.D., PRILIPKO, L.T., MIKHALYUK, R.V.

Interaction of polyacrylamide with bentonite suspensions. Izv.vyb.-
ucheb.zav., khim. i khim.tekh. 6 no.2:248-251 '63. (MIRA 16:9)

1. Kiyevskiy tekhnologicheskii institut pishchevoy promyshlennosti,
kafedra fizicheskoy, kolloidnoy i analiticheskoy khimii.
(Acrylamide) (Bentonite)

L 18872-66 EWP(k)/EWI(m)/EWP(e)/ENP(t) JD

ACC NR: AP5022548

SOURCE CODE: UR/0226/65/000/009/0095/0098

AUTHOR: Chegoryan, V. M.; Mikhalyuk, R. V.; Natanson, E. M.; Rybchinskiy, M. I.

ORG: Institute of General and Inorganic Chemistry, AN UkrSSR (Institut obshchey i neorganicheskoy khimii AN UkrSSR)

TITLE: Express method of determining dispersity of metal powders

53
B

11,44,55

SOURCE: Poroshkovaya metallurgiya, no. 9, 1965, 95-98

TOPIC TAGS: metal powder, chemical dispersion, dispersion hardening, sedimentation separation, metallurgic process

ABSTRACT: Results of an investigation of the dispersity of highly disperse metal powders by means of a photosedimentometer are presented. Comparison with results obtained by independent methods shows good agreement. A rational procedure of selection of the dispersion medium in dispersion analysis of certain metal powders is described. Orig. art. has: 3 figures and 2 tables. [Based on authors' abstract.]

[MT]

SUB CODE: . 11/ SUBM DATE: 15Feb65/ ORIG REF: 003/ OTH REF: 006/

Card 1/1 *do*

MIKHALYUK, V., shturman, (g.Irkutsk)

Determining the wind direction and speed by means of a surveying
radar. Grazhd.av.13 no.4:13 Ap '56. (MLRA 9:7)
(Radar in aeronautics)

MIRHAMEDOVA, L. A.

Defended his Dissertation for Candidate of Chemical Sciences in the Kazan' State University, Kazan', 1955

Dissertation: "Investigations in the Field of Camphenylanic and Campholenic Aldehydes"

SC: Referativnyy Zhurnal Khimii, No. 1, Oct. 1955 (11/27/55), 25 Apr 54.

MIKHAN'KOV, O. M., CAND GEOL-MIN SCI, "GEOLOGICAL
STRUCTURE AND CONDITIONS OF FORMATION OF PETROLEUM AND
GAS DEPOSITS IN THE TECTONIC ZONE OF NEFTECHALA-PADAR OF
THE NIZHNE-KURINSKAYA DEPRESSION." MOSCOW, 1961. (ALL-
UNION PETRO-GAS SCI RES INST "VNII", MAIN SCI RES INST OF
THE STATE ECONOMIC COUNCIL USSR). (KL, 3-61, 208).

MIKHANKOV, Yu. M.

Cand Geog Sci - (diss) "Stratigraphy of quaternary deposits and pleogeographic conditions of the southeastern part of the Western Siberian Depression." Leningrad, 1961. 20 pp; (Leningrad State Pedagogical Inst imeni A. I. Gertsen); 150 copies; price not given; (KL, 7-61 sup, 223)

ZARINA, Ye.P.; KAPLYANSKAYA, F.A.; KRASNOV, I.I.; MIKHANKOV, Yu.M.;
TARNOGRADSKIY, V.D.

Periglacial formation in the West Siberian Plain. Mat. VOSEGI
Chet. geol. i geomorf. no.4:54-104 '61.

(MLA 7:5)

MIKHANKOV, Yu.M.

Simplified method of determining the rate of alluvium accumulation
Inform.sbor.VSEGEI no.50:39-41 '61. (MIRA 15:8)
(Alluvium)

MIKHANLOV, F. A.
25898

O Mekhanizme Deystviya Iskusstvennogo Pnevmotoraksa
(Po Povodu Statey L. M. Modelya Voprosy Fiziologicheskogo Mekhanizma Deystviya
Kollaposoterapii Tuberkuleza Legkikh i V. A. Kavicha-Shcherbo
O Mekhanizme Kollapsoterapii V Zhurn Byulleten' In-Ta Tuberkuleza
Akad. Med. Nauk SSSR, 1947, No. 2,
S Primech. Red) Byulleten' In Ta Tuberkuleza Akad. Med. Nauk SSSR
1948, No. 1, S. 18-21

SO: LETOPIS NO. 30, 1948

111 K...
SHKARANDA, I.T., kand.tekhn.nauk; KOTOV, M.P., prof.; CHECHENEV, N.I.,
kand.tekhn.nauk; MIKHANOSHA, Ye.S., inzh.

Making high-viscous gelatins of chrome-tanned shavings. Izv. vye.
ucheb. zav.; tekhn.prom. no.2:40-46 '58. (MIRA 11:6)

1.Kiyevskiy tekhnologicheskii institut legkoy promyshlennosti.
(Gelatin)

YUDIN, A.V., dotsent, kand.khim.nauk; BARBOY, V.M., inzh.; MIKHANOSHA,
Ye.S.

Using synthetic ion-exchange resins in light industry. Izv.
vys.ucheb.zav.;tekh.log.prom. no.1:62-71 '59.

(MIRA 12:6)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti.
Rekomendovana kafedroy obshchey khimicheskoy tekhnologii.
(Resins, Synthetic)

MIKHANOSHA, Ya.S., inzh.; YUDIN, A.V., doktor khim. nauk, prof.; BARBOY,
V.M., kand. tekhn. nauk, dotsent

Static capacity of exchange of the KB-4 cation exchanger in
chromium (III) as dependent on the conditions of absorption.
Izv. vys. ucheb. zav., tekhn. leg. prom. no.4:34-38 '63.

(MIRA 16:10)

1. Kiyevskiy tekhnologicheskii institut legkoy promyshlennosti.
Rekomendovana kafedroy tekhnologii kozhi.

MIKHANOSHA, Ye.S., inzh.; YUDIN, A.V., doktor ~~khimich.~~ nauk, prof.;
BARBOY, V.M., kand. tekhn. nauk, dotsent

Investigating the sorption of chromium (III) by KB-4 cation
exchanger under dynamic conditions. Izv. vys. ucheb. zav.;
tekh. leg. prom. no.5:44-50 '63. (MIRA 16:14)

1. Kiyevskiy tekhnologicheskoy institut legkoy promyshlennosti.
Rekomendovana kafedroy tekhnologii kozhi.

MIKHANOV, S.A.; TARAKANOV, S.G.

Foam formation in gelatin solutions. -plast. massy no. 8:1 -64
1964. (MIRA 17:12)

L 35547-65 EWT(m)/EWP(j) Pc-4 RM

ACCESSION NR: AP5008192

S/0286/65/000/005/0069/0069

AUTHORS: Mikhanov, S. A.; Tarakanova, Ye. Ye.

15
B

TITLE: A method for obtaining foam plastic, Class 39, No. 168871

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 69

TOPIC TAGS: foam plastic, starch, aqueous solution, surface active substance, formaldehyde

ABSTRACT: This Author Certificate presents a method for obtaining a foam plastic with the application of starch. To simplify the technique of the foam plastic production, powdered starch is dropped into water while an aqueous solution of a surface active substance with gelatin and formaldehyde is being whipped into foam. The foam solidifies while being heated.

ASSOCIATION: Vladimírskiy nauchno-issledovatel'skiy institut sinteticheskikh smol (Vladimir Scientific Research Institute of Synthetic Resins)

SUBMITTED: 08Apr63

ENCL: 00

SUB CODE: MT, GC

NO REF SOV: 000

OTHER: 000

Card 1/1

KIRSANOVA, M.K., kand. tekhn. nauk; MIKHANOVSKIY, D.S., inzh.;
MONFRED, Yu.B., kand. tekhn. nauk; KREINDLIN, A.N.; SAVKOV, V.
BEYUL, G.A., inzh.; ZHUCHKOV, N.

[Means for increasing the capacity of plants prefabricating
elements for I-464A series houses] Puti povysheniia proizvod-
stvennoi moshchnosti zavodov, vypuskaiushchikh doma seriia
I-464A. Moskva, Gosstroizdat, 1962. 26 p. (MIRA 17:7)

1. Akademiya stroitel'stva i arkhitektury SSSR. Tsentral'nyy
nauchno-issledovatel'skiy i proyektno-eksperimental'nyy institut
industrial'nykh zhilykh i massovykh kul'turno-bytovykh zdaniy.
2. Tsentral'nyy nauchno-issledovatel'skiy i proyektno-eksperi-
mental'nyy institut industrial'nykh, zhilykh i massovykh kul'turno-
bytovykh zdaniy Akademii stroitel'stva i arkhitektury SSSR (for
Kirsanova, Mikhanovskiy, Monfred). 3. Nauchno-issledovatel'skiy
institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi
stroitel'stvu Akademii stroitel'stva i arkhitektury SSSR (for
Beyul, Kreindlin, Savkov, Zhuchkov).

MIKHANOVSKIY, D. insh.

Large-panel frameless house in Vyksa. Na stroi.Mosk. 1 no.11:26-29
N 58. (MIRA 11:12)

(Vyksa--Apartment houses) (Concrete slabs)

MIKHANOVSKIY, D., inzh.

Houses built of form-made panels. Stroitel' no.2:3-6 P '59.

(MIRA 12:5)

(Apartment houses) (Concrete construction--Formwork)

SCW 97/58/2/1/16

AUTHOR: Monfred, ru. B., Candidate of Technical Sciences
Mikhanovskiy, D.S., Engineer.

TITLE: The Manufacture of Reinforced Concrete Panels
in Vertical Framework, (Izgotovleniye zhelezobetonnykh
paneley v vertikal'nykh formakh).

PERIODICAL: Beton i Zhelezobeton, 1958, Nr 2, pp. 41-45 (USSR).

ABSTRACT: The method of casting into vertical forms for the
production of solid reinforced concrete panels forming
walls and floors is far more advantageous than other
production methods. The main advantages are the con-
siderable saving in the floor area of the workshop, of
l a b o u r and reinforcement. A detailed description of
the manufacturing processes is given. Figure 1 il-
lustrates the use of the vertical form by the Magnitogorsk
factory. The forms are of steel and the consolidation
is performed by vibration. The vertical method of slab
casting began in 1956 in one of the Leningrad factories
and was followed by the Proyecktstroymekhanizatsiya of
the Minmetallurgkhimstroy. In the same year the Institute
for Building Constructions, ASiA, USSR, constructed and
tested in the Borovsk factory of Glavmosstroy. a new
steel form made from reinforced concrete with turning sides,

Card 1/2

SOV/9/58/2/1/16
The Manufacture of Reinforced Concrete Panels in Vertical Framework.

as indicated in Figures 2 and 3. In this form six panels can be cast at the same time. Figure 4 illustrates the Vykxa Casting Yard where other types of forms are manufactured. These consist of steel transferrable plates designed by the Giprostrommash of the Glavstroyproekt, Gosstroy USSR. Vertical forms of the Giprostrommash are designed to cast between five and nine panels at the same time. The steel sheets are 24mm thick and are connected to vibrators. Figure 5 illustrates the form manufactured by the Vykxa factory. Experience has shown that the speed of casting slabs when using vertical forms depends on the method of delivery of the concrete mix. The Vykxa Concreting Yard uses a crane with 0.9m³ bucket capacity for filling the forms consisting of eight slabs (see Figure 1). Form filling lasts one hour. There are six figures.

Card 2/2

1. Reinforced concrete--Applications
--Casting 2. Reinforced concrete

SOV/97-53-3-8/15

AUTHORS: Mofred, Yu.B.. Candidate of Technical Sciences and
Mikhanovskiy, D. S.. Engineer

TITLE: Manufacture of Solid Reinforced Concrete Panels Cast in
Vertical Cassette Forms

PERIODICAL: Beton i zhelezobeton, 1958, No 4, pp 147-150 (USSR)

ABSTRACT: The first cassette forms were constructed in the factory for
crushing and grinding machines in Vyks. These forms were
used for casting floor and wall panels and partitions for
the erection of 4-storey blocks of flats in Vyks. For
forms were used: two for floor panels and two for external
walls and partitions (see also Yu. B. Mofred and D. S.
Mikhanovskiy in Beton i zhelezobeton, 1958, No 2). Fig 1
shows a form with five compartments, used for casting floor
slabs. Fig 2 shows the construction of this form, which
is made from sheet steel. Fig 3 shows the reinforcement for
the panel positioned in the form. Vibration of the concrete
mix is carried out by pressure vibrators I-1 and I-2.
The process of casting panels starts with positioning the
reinforcement in previously oiled forms. Then the dividing
Card 1/2 plates are placed in position thus affecting the casting of

SOV/97-59.3-8/15

Manufacture of Solid Reinforced Concrete Panels Cast in
Vertical Cassette Forms

several slabs at once. Fig 4 shows assembly of a cassette form using a crane. Fig 5 shows delivery of concrete mix to the form in a 0.9 m³ capacity bucket. The products are cured by steam at a temperature of approximately 70°C for the duration of 14-17 hours. The form is removed when the strength of the products is at least 70% of the calculated strength. Tests showed that when the casting is carried out in the vertical position it is possible to remove the form when the strength of the concrete reaches 30-40 kg/cm². Fig 6 shows the removing of the ready panels, which is carried out after curing when the temperature has fallen no more than 40°C above the surrounding temperature. There are 7 figures.

Card 2/2

LYUBETSKIS, S.; MIKHANOVSKIY, D., starshiy nauchnyy sotrudnik; GALAYEV,
A., inzh.

Finished surfaces of exterior walls. Zhil.stroi. no.10:32
'59. (MIRA 13:2)

1. Direktor zavoda zhelezobetonnykh izdeliy v Vil'nyusse
(for Lyubetskis). 2. Nauchno-issledovatel'skiy institut
zhilishcha Akademii stroitel'stva i arkhitkтуры SSSR (for
Mikhanovskiy).
(Vilnius--Concrete slabs)

MIKHANOVSKIY, D.S., inzh.; SHTEYNBERG, A.S.

Intensifying temperature conditions in casting reinforced
concrete products in molds. Bet. i zhel.-bet. no.1:31-33
Ja '60. (MIRA 13:5)
(Precast concrete)

MIKHANOVSKIY, D. S.

Cand Tech Sci - (diss) "Basic problems of the manufacture of large panel home-building products in cassette forms with sheets of plate steel." Moscow, 1961. 19 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Order of Labor Red Banner Construction Engineering Inst imeni V. V. Kuybyshev); 200 copies; price not given; (KL, 6-61sup, 221)

MIKHANOVSKIY, D., inzh.

Survey of the technology of manufacturing large-panel elements
in European countries. Zhil. stroi. no.7:31-32 '62.

(MIRA 15:9)

(Europe—Precast concrete construction)

SOROKER, V.I., prof.; MIKHANOVSKIY, D.S., inzh.

Intensification of vibration in cassette molds of the State Institute
of Design and Planning for the Building Industry. Bet. 1 zhel.-bet.
8 no.3:93-97 Mr '62. (MIRA 15:3)

(Concrete)

APPEL', S.A.; TILEVICH, M.I.; MONFRED, Yu.B.; MIKHANOVSKIY, D.S.; MESINEV, G.;
TATARINOV, A.S.; TULYAKOV, A.P., inzh.

Hot molding of keramzit concrete panels at the Serpukhov Housing
Construction Combine. Strci. mat. 11 no.10:8-9 0 '65.

(MIRA 18:10)

1. Nachal'nik Serpukhovskogo domostroitel'nogo kombinata (for Appel').
2. Glavnyy inzh. Serpukhovskogo domostroitel'nogo kombinata (for Tilevich).
3. Zamestitel' direktora TSentral'nogo nauchno-issledovatel'skogo i proyekt'nogo instituta tipovogo i eksperimental'nogo proyektirovaniya zhilishcha (for Monfred).
4. Rukovoditel' laboratorii TSentral'nogo nauchno-issledovatel'skogo i proyekt'nogo instituta tipovogo i eksperimental'nogo proyektirovaniya zhilishcha (for Mikhanovskiy).
5. Rukovoditel' gruppy TSentral'nogo nauchno-issledovatel'skogo i proyekt'nogo instituta tipovogo i eksperimental'nogo proyektirovaniya zhilishcha (for Mesinev).
6. Nachal'nik KPD-2 Industroyproyekta (for Tatarinov).

AUTHOR: Mikhanovskiy, Sh.P., Engineer.

114-8-1/16

TITLE: A double-bladed [Kaplan] water turbine. (Dvukhperovaya gidroturbina)

PERIODICAL: "Energomashinostroyeniye" (Power Machinery Construction),
1957, Vol.3, No.8, pp. 1 - 4 (U.S.S.R.)

ABSTRACT: A current problem in the development of water turbines is the application of Kaplan turbine to heads of 60 to 80 m. A possible solution is to use a double-bladed turbine in which each blade flange of the runner has two blades. In this way, the number of blades is doubled without greatly complicating the construction of the runner hub. The two blades may be made either separate and detachable or in one piece. When they are made in one piece they are cast together with the flange. This makes the casting and machining of the blades somewhat more difficult but there is no need to make arrangements to fix the two separate blades to the flange. The construction of a double-bladed runner is illustrated in Fig. 1.

In single-bladed turbines, the pitch between the blades remains constant when the blade angle is changed. In double-bladed turbines variation of the angle alters the pitch between blades on different flanges, whilst the pitch between blades on a single flange remains constant as shown in Fig. 2. This

Card 1/4

A double-bladed [Kaplan] water turbine. (Cont.) 114-8-1/16
special feature of double-bladed turbines should influence the power and cavitation properties of the wheel. In order to elucidate the influence of pitch changes, comparative power and cavitation tests were made on a model wheel type ПЛ-561 of 250 mm diameter in which the pitch between blades could be maintained either as in the case of a single row of blades or as in that of the double-bladed variant. The test results given in Fig.3 show that the efficiencies of the single row and double-bladed variants are identical for one blade angle which corresponds to equal pitch between blades in the double-bladed variant. At other angles the efficiency of the double-bladed wheel is lower. These comparative power tests should be considered as the first step in the development of a new type of runner and from this point of view the first results are very satisfactory. The cavitation conditions limit the region of application of high head wheels. This affects principally the rate of flow and any particular power station has a rate of flow at which the turbines work most of the time. The average flow rate corresponds to some certain angle of the runner blade. Because of the importance of cavitation properties in high head wheels cavitation tests were made on the same model wheel as was used for the tests already described and the results are given in

Card 2/4

A double-bladed [Kaplan] water turbine. (Cont.) 114-8-1/16
Fig. 4. It will be seen that the cavitation properties of the double wheel are as good as those of the normal wheel. The cavitation properties improve as the runner hub diameter is reduced. It has been established that the hub of a double-bladed wheel can be made appreciably smaller than that of a corresponding standard wheel. This is illustrated on a particular example. The improvement in the cavitational properties of double-bladed wheels as compared with normal wheels may be used to reduce the negative discharge head, to increase the turbine output or to cut down the diameter of the runner. Less effort is required to rotate the double blades than the equivalent single blades. Vibration troubles should be less with double-bladed runners.

The comparison of energy and cavitational properties which has been made does not resolve all the problems of the new design and further tests are necessary, particularly in connection with the use of a relatively large number of blades. The exact effect on the vibration characteristics of using double blades should be examined further. However, it would appear that for certain operating conditions the use of double-bladed runners on high head Kaplan turbines is very desirable.
Card 3/4

MIKHANOVSKIY, Sh. P.

✓ 655. THE DOUBLE-BLADED WATER TURBINE. Mikhnovskii, Sh. P.
(Energomashinostroyeniye (Pwr Mach., Leningrad), AUG. 1957, 1-4). When variable-pitch turbines are required for high heads (60-80m), one method of providing the necessary blade area without increasing the diameter of the rotor is to use pairs of blades, each pair mounted on a single flange and rotating with it when the pitch is varied. An illustrated description is given of this arrangement, and comparative curves of the efficiency and cavitation with single and double blades. One advantage of the double blades is reduced cavitation. (L)

14(6)

AUTHOR:

Mikhanovskiy, Sh.P., Engineer

SOV 08-52-3-5/17

TITLE:

A New Type of High Pressure Adjustable Vane Turbine
(Novyy tip vysokonapornoy povorotnolopastnoy turbiny)

PERIODICAL:

Gidrotekhnicheskoye stroitel'stvo, 1959, Nr 3, pp
30-33 (USSR)

ABSTRACT:

Author's certificate Nr 89458 was given to the author of this article for a new type of a high-pressure adjustable twin vane turbine, which was described by him for the first time in "Energomashinostroyeniye" 1957, Nr 8. A double number of vanes does not complicate the construction of the runner, and tests of a high-pressure PL642 runner (250 mm in diameter) made by the Laboratoriya vodyanykh turbin Leningrad'skogo metallicheskogo zavoda (Laboratory of Water Turbines of the Leningrad Metallurgical Plant) showed that the efficiency coefficient (Figure 4) of the twin vane runner is higher and the cavitation coefficient lower than that of a normal univane run-

Card 1/2

A New Type of High Pressure Adjustable Vane Turbine

SOV/08-50-7-5/17

ner (Figure 5). The highest value of the efficiency coefficient is achieved when all vanes are spaced equally. Tests must be continued. There are 2 sets of graphs and 3 sets of diagrams.

Card 2/2

MIKHANOVSKIY, Sh. P., Cand Tech Sci (diss) -- "The use of rotary-blade turbines for high water pressures". Leningrad, 1960. 14 pp (Min Higher and Inter Spec Educ RSFSR, Leningrad Polytech Inst im M. I. Kalinin), 150 copies (KL, No 11, 1960, 133)

MIKHANOVSKIY, Sh.P., inzh.

Calculated and experimental power characteristics of runners
of the hydraulic turbines with variable-pitch blades. Elek.
sta. 31 no.1:20-23 Ja '60. (MIRA 13:5)
(Hydraulic turbines)

MIKHANOVSKIY, S.P., kand.tekhn.nauk

Double-blading Kaplan turbine at the Uch-Kurgan Hydroelectric Power
Station. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch. i tekhn.-
inform. no.4:51-54 '62. (MIRA 15:7)
(Uch-Kurgan--Hydraulic turbines)

PROCESSES AND PROPERTIES INDEX

10

CA

4-Hydroxy-4-methyl-2-hexynoic acid. H. I. Mikhailov and N. S. Leukhin. *Uchenye Zapiski Mordovskogo Pedagog. Inst.* 1, 199-8(1940); *Khim. Referat. Zhur.* 4, No. 9, 55(1941); cf. C. A. 36, 6666. —Add dropwise $Mg(C_2H_5O)_2 \cdot 2H_2O$ to $HgBr_2$, let the reaction go to completion, cool the mixt. and pass in a current of CO_2 (5-6 days is required). Decomp. the mixt. with water, ext. with ether and distill in *vacuo*. 4-Hydroxy-4-methyl-2-hexynoic acid, b.p. 80-1°, *mp* 141-2° (decompn.), is unstable and becomes yellow in the air. W. R. Hens

METALLURGICAL LITERATURE CLASSIFICATION

ASB-SLA

OPEN CHEMICAL ELEMENTS

MATERIALS INDEX

COMMON ABSTRACTS INDEX

PROCESSES AND PROPERTIES INDEX

7

CA

Detection of C_2H_2 in C_2H_4 derivatives. B. I. Mikhant'ev and M. P. Sikorov. *Uchenye Zapiski Merikanskogo Pedagog. Inst.* 1, No. 1, 199-202 (1940); *Khim. Reform. Zhur.* 4, No. 9, 88 (1941).—The heating of alca. and hydroxy acids of the acetylene series with metallic Na and hydron Am/DII results in their decompn. with the liberation of C_2H_2 . A red-brown ppt. of Cu acetylide is formed on passing the C_2O_2 formed into an ammoniacal soln. of Cu_2Cl_2 . Traces of C_2H_2 and the presence of a triple bond in small amts. of org. compds. can be detected. W. R. Henn

ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

PROCESS AND PROPERTIES INDEX

10

The addition of hydrogen to acetylene compounds
XXXIII. Synthesis and catalytic hydrogenation of hydroxy acids of the acetylene series. Yu. S. Zal'kind and H. I. Mikhant'ev. *J. Gen. Chem.* (U. S. S. R.) 11, 92-8 (1941); *cf. C. A.* 34, 7847. —When CO₂ is passed through Me₂CO and the mixed vapors are passed into BrMgC·C·MgBr (I) at -8°, 0.76% 1,1-dimethyl-2-buten-1-ol-4-carboxylic acid (II), decomp. on vacuum distn., is obtained. When Me₂C(OMgBr)C·CMgBr (III) is treated with CO₂ at 8°, the yield of II is 1.25%. This can be raised somewhat if the CO₂ is passed into the mixt. for 5 days. Treatment of III with ClCO₂Me gives 1.5% II. The Ag, Cu, Ba and Ca salts of II are insol. The Ag salt is explosive. The amide m. 72-3°. In similar reactions 1, Ph₂CO and CO₂ give 0.7% 1,1-diphenyl-2-buten-1-ol-4-carboxylic acid (IV), m. 78-80°, decomp. 127°. Ph₂C·(OMgBr)C·CMgBr (V) and CO₂ give 3.6% IV, and V with ClCO₂Me gives 0.44% IV. The Ag, Cu, Ca, Ba, Sr and Pb salts of IV are insol.; the amide m. 106-7°. Hydrogenation of II, IV and their amides over Pd and Pt adds 4 H atoms. The rate of addn. over Pt is regular, but over Pd the last 2 H atoms add more slowly. This effect is not as marked as in the acetylene γ -glycols however.

H. M. Leicester

A.S.M. S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

PROCESSOR AND PROGRAMS MODE

10

Ca

Synthesis and study of methylheptylcarboxylic acid (4-methyl-2-heptyl-4-ol-1-carboxylic acid). D. I. Sukhbat'yev (Volga Forest-tech. Inst. Gor'kiy). *Chem. (U.S.S.R.)* 18, 641-2 (1945) (English summary). *ReMette* (0.25 mole) was treated with 12.35 g. MeMgCl (0.11)C11 (in 20 cc. Et_2O) with cooling by a water bath; after cessation of ethane evolution the mass was cooled to 0° and treated with CO_2 for 3-4 days. After treatment with water and dil. H_2SO_4 , an Et_2O ext. was distd. to yield 3.5 g (21%) 4-methyl-2-heptyl-4-ol-1-carboxylic acid as a pleasantly smelling oil, b_p $130-1^\circ$, b $141-2^\circ$ (decamps); its A_1 and decamps. on heating. O. M. Kuznetsov

METALLURGICAL LITERATURE CLASSIFICATION

FROM SYNONYMS

SYNONYMS

FROM NOMENCLATURE

MIKHANT'YEV, B.I.

Chemical Abstr.
Vol. 48 No. 9
May 10, 1954
Organic Chemistry

5
② Chem
Synthesis of the vinyl ethers of higher aliphatic alcohols.
by B. Shostakovskii, B. I. Mikhant'ev, and L. A. Neter-
man. *Bull. Acad. Sci., U.S.S.R., Div. Chem. Sci.* 1952,
466-7 (Engl. translation).—See C.A. 47, 8789s. H. L. H.

MT

MIKHANT'YEV, B.I.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Organic Chemistry

5
③ Clem
~~Indirect oxidation of aliphatic alcohols. M. F. Shostakovskii, B. I. Mikhant'ev, and N. N. Orshinnikova. *Bull. Acad. Sci. U.S.S.R. Div. Chem. Sci.* 1952, 659-62 (Engl. translation).—See *C.A.* 48, 1242c. H. L. H.~~

MF

MIKHANT'YEV, B.I.

USSR.

Indirect vinylation of aliphatic alcohols. M. P. Shostakovskii, B. I. Mikhan'tsev, and N. N. Orlovskaya. *Izv. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1952, 1080-1104.

—Addn. of 0.2 g. Pb_2 (or concd. HCl or H_2SO_4) to 37 g. Me_2COH and 60 g. $PhOCH_2CH_3$ at 30° caused a temp. rise to $75-80^\circ$; treatment of the mixt. with K_2CO_3 and metallic Na after decline of the temp., and distn. yielded 37% $MeCH(OPh)OCMe_2$ (I), b_m $53-5^\circ$, d_4^{20} 0.9560, n_D^{20} 1.4790, 28% $MeCH(OCMe_2)(Ph)$ (II), b_m $63-4^\circ$, d_4^{20} 0.9216, n_D^{20} 1.4054, and 25% $MeCH(OPh)_2$, b_m $144-0^\circ$, d_4^{20} 1.0806, n_D^{20} 1.5542. It hydrolyzes rapidly in dil. H_2SO_4 , and simple heating of I to $140-50^\circ$ gives $Me_2COCH_2CH_3$ and $PhOH$. To 40 g. $CH_2=CHCH_2ONa$ was added 78.3 g. $PhOCH_2CMe_2$ (temp. rise to 82°), yielding after filtration and distn.: 30% $MeCH(OCMe_2)CH_2CH_2OPh$ (III), b_m $85-7^\circ$, d_4^{20} 0.9013, n_D^{20} 1.4908, 20% $MeCH(OCMe_2)CH_2CH_2CH_3$, b_m $147-0^\circ$, d_4^{20} 0.8483, n_D^{20} 1.4208, and 21% $MeCH(OPh)CH_2CH_2CH_3$; heating III, as above, gave 77% $CH_2=CHCH_2OCMe_2$. Similar reaction of $PhOCH_2CH_3$ with $H_2C=CHMeOH$ gave 32-40% $MeCH(OCMe_2)CH_2CH_2Me$, b_m $57-60^\circ$, d_4^{20} 0.9553, n_D^{20} 1.4785, 27-35% $MeCH(OCMe_2)CH_2CH_2Ph$, b_m $73-4^\circ$, d_4^{20} 0.9221, n_D^{20} 1.4948, and 23-35% $MeCH(OPh)CH_2CH_2Me$. The thermal treatment of the mixtnt. acetals, as described above, gave 75-77% yields of the following new vinyl ethers: $EtMeCH(OCMe_2)CH_2CH_3$, b_m $81-1.5^\circ$, d_4^{20} 0.7729, n_D^{20} 1.3970; $CH_2=CHOAc$, b_m $75-5.3^\circ$, d_4^{20} 0.7720, n_D^{20} 1.3978; $CH_2=CHOCH_2CH_2CH_3$, b_m $60-0.7^\circ$, d_4^{20} 0.7900, n_D^{20} 1.4082. G. M. Kasidapoff

MIKHANT'Y = 1, I 1.

chem

Chem Abs 448

1-25-54

Organic Chemistry

~~α-Butoxyethyl lactate. B. I. Mikhant'ev and M. E. Kosolapoff. *Acad. Nauk S.S.S.R. (Int. Org. Chem. Ser. Org. Soedineni)*, Sbornik 2, 31-2 (1952); *Ch. U.S.S.R.* 43, 3785i.—To 90 g. MeCH(OH)CO₂H was added over 2 hrs. 100 g. BuOCH₂CH₃ and the mixt. was stirred 5-6 hrs. at 92-5°. Distn. gave 38% MeCH(OBu)₂CCH(OH)Me, b. 188-0°, d₄ 0.9700, n_D 1.4195. Similarly was prepd. 32% MeCH(OEt)₂CCH(OH)Me, b. 152-4°, d₄ 1.012, n_D 1.4100, after 5 hrs. at 34-6°. The reactants must be completely anhyd.~~

G. M. Kosolapoff

7-19-54

MICHANET'Y = 6, 2-1.

④

Chem Abs v48
1-25-54
Organic Chemistry

~~Vinyl lactate. M. P. Shostakovskii and B. I. Mikhant'ev
Akad. Nauk S.S.S.R., Inst. Org. Khim. Sintesy Org. Soedin-
enii, Sbornik 2, 46-7(1952); cf. Reppe, Acetylene Chemistry
1949, p. 57 (C.A. 43, 8078d).—An autoclave is charged with
90 g. anhyd. MeCH(OH)CO₂H and 10-12 g. Zn or Cd lac-
tate, and C₂H₂ added to 15-18 atm. Heating with agitation
at 90-100° for 4-5 hrs. until absorption ceases followed by
distn. of the products, gave 32% MeCH(OH)CO₂CH:CH₂,
b. 153° (crude, b. 140-52°), d₄ 1.0774, n_D²⁰ 1.4088. No Cu
or Ag parts must come into contact with C₂H₂. G. M. K.~~

MA
7-19-54

MIKHANT'YEV, B. I.

USSR/Chemistry - Vinyl Ethers

May/June 52

"Synthesis of Vinyl Ethers of Higher Fatty Alcohols," M.F. Shostakovskiy, B.I. Mikhant'yev, V.A. Neterman, Inst of Org Chem, Acad Sci USSR

"Iz Ak Nauk, Otdel Khim Nauk" No 3, pp 484-488

Studied vinylization of fatty alcs C₆ to C₁₀. Obtained vinyl ethers C₈ to C₁₂ in yields of 80.4 to 89.2% of the theoretical yield. Gives the phys characteristics of the synthesized vinyl ethers.

220112

MIKHANT'YEV, B. I.

USSR/Chemistry - Cellulose; Naval Stores Mar 52
"Contemporary Forest Products Chemistry," B. I. Mikhant'yev Cand Chem Sci

"Nauka i Zhizn" Vol XIX, No 3, pp 22-24

The use of wood rosin has been expanded: an anti-oxidant for cracking gasolines, a plasticizer for rubber, phenols, higher hydrocarbons, rosin acids, plastics for elec insulation, etc., are being produced from it. I.I. Zhukov demonstrated that cellulose can be easily split into monosaccharides (used as animal fodder) by exposing it to ultrasound waves or hard gamma radiation. Y.J. Sharkov

216721

established in 1950 that hydrolysis of cellulose proceeds more efficiently in the presence of benzene. Lignoston and Lignofol' (wood treated with bakelite and pressed laminated wood treated with bakelite) are being used as substitutes for non-ferrous metals in machine building, ship building, etc. Subway rails are backed with lignoston. Heat insulating plates and flexible construction plates made of wood fibers are being manufd. Partly hydrolyzed sawdust is used alone or in combination with phenol, urotropin, and stearin for the production of industrial plastics (Barkalait). In the USSR alone, colophony, rosin, wood oils, and cellulose are being treated with hydrogen in order to convert them into more useful products.

216721

MIKHANT'YEV, B. I., GOLODOV, F. G., SOKOL'SKIY, D. V., and SHOSTAKOVSKIY, M. F.

"Catalytic Hydrogenation of Vinyl Ethers," Zhur. Prik. Khim., 25, No.8, 1952

Vinyl ethyl, vinyl isopropyl and vinyl butyl ethers can be hydrogenated quantitatively by using a low temp and aq solns, and in the presence of nickel and Pd/CaCO₃ catalysts. Hydrogenation at temps close to zero requires little time. With the 2nd batch of vinyl ether, the activity of the catalyst increases and the rate of hydrogenation is shortened from 3 hrs to 20-30 min. For H-volumetric analysis of vinyl butyl ether, the best catalyst is Ni, and for vinyl isopropyl ether the best catalyst is Pd/CaCO₃. Both catalysts are suitable for the hydrogenation of vinyl ethyl ether. The emf at the catalyst was measured during the course of the reaction and a special jacketed vessel made of Mo glass used. 228T11

MIKHANT'YEV, B.I.

U.S.S.R.

Indirect vinylation of monocarboxylic acids and hydroxy acids. M. F. Shostakovskii, B. I. Mikhant'ev, and N. N. Orzhinnikova. *Bull. Acad. Sci. U.S.S.R., Div. Chem. Sci.* 1953, 499-503 (Engl. translation).—See *C.A.* 49, 9015c. H. I. H.

MIKHANT'YEV, P. I.

3

Indirect vinylation of monocarboxylic acids and hydroxy acids. M. P. Shostakovskii, B. I. Mikhant'ev, and N. N. Orshanskaya. *Izv. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk*, 1953, 556-61. — Transesterification of vinyl ethers with acids yields vinyl esters in moderate recoveries. Thus, stirring 23.2 g. AmCO_2H , 100 g. BuOCH:CH_2 , and 0.1 g. P_2O_5 led to a spontaneous reaction (temp. rise up to 105°) despite external cooling; after some 35-40 min. the mixt. was neutralized with K_2CO_3 and yielded 72.5 g. BuOCH:CH_2 , n_D^{20} 1.4160, d_4^{20} 0.8905; 47% $\text{AmCO}_2\text{CH:CH}_2$, b. $168-70^\circ$, n_D^{20} 1.4180, d_4^{20} 0.8905; (hydrogenation gave the satd. ana- the original reaction mixt., along with traces of AmCO_2Bu and 28% $\text{MeCH(OBu)O}_2\text{CMe}$, b. $88-90^\circ$, n_D^{20} 1.4140. Similarly 18 g. $\text{MeCH(OH)CO}_2\text{H}$ and 100 g. BuOCH:CH_2 with 0.1 g. P_2O_5 gave 86.1% unreacted BuOCH:CH_2 , 15% $\text{MeCH(OH)CO}_2\text{CH:CH}_2$, b. $151-3^\circ$, d_4^{20} 1.064, n_D^{20} 1.4088, 3.4 g. MeCH(OBu) , 13.4% $\text{MeCH(OBu)O}_2\text{CCH(OH)Me}$, b. $188-9^\circ$, n_D^{20} 1.4105, d_4^{20} 0.9683. $\text{MeCH(OH)CH}_2\text{CO}_2\text{H}$ (10.4 g.) and 50 g. BuOCH:CH_2 with 0.1 g. P_2O_5 gave 88% unreacted BuOCH:CH_2 , 18% $\text{MeCH(OH)CH}_2\text{CO}_2\text{CH:CH}_2$, b. $170-3^\circ$, d_4^{20} 1.0713, n_D^{20} 1.4186, and 3.8 g. MeCH(OBu) . G. M. Kosolapoff

Inst. Organic Chemistry, AS USSR

MIKHAYEV, B. I.

USSR:

✓ Ionic copolymerization of vinyl ethers. M. P. Shostakovskii, B. I. Mikhaev, and N. N. Ovchinnikova. *Bull. Acad. Sci. U.S.S.R., Div. Chem. Sci.* 1953, 847-50 (Engl. translation).—See C.A. 48, 12008b. H. L. H.

MIKHANT'YEV, B. I.

V Iodic copolymerization of vinyl ethers. M. P. Shvarts-
 koraki, B. I. Mikhant'ev, and G. S. Pichimukha (Inst.
 Org. Chem. Acad. Sci. U.S.S.R., Moscow). *Izv. Akad.
 Nauk S.S.S.R., Otdel. Khim. Nauk* 1953, 721-5; cf. C.A.
 48, 6243a. To 73 g. EtOCH:CH₂ and 123 g. CH₂:CHO-
 C₆H₅ was added at 35° 1-2 drops catalyst (5% FeCl₃·5H₂O
 in BuOH); the reaction proceeded vigorously with heat
 evolution, and after 2 hrs., the mass was heated *in vacuo*
 to 100°, yielding a residue of 85% crude polymer. Extn.
 with EtOH and fractional pptn. with H₂O gave: polymer of
 EtOCH:CH₂, 2:1 copolymer of the Et and C₆H₅ ethers,
 and a series of copolymers with reactant ratios ranging to
 5:4. Similarly were isolated 1:1 copolymers of 0.1M
 pairs (% yield, d₄²⁰, n_D²⁰, and solubilities given): EtOCH:CH₂-
 CH₂:CHOCHMe₂, 63, 0.9270, 1.4510, 0.7867, sol. in EtOH
 higher alcs., Et₂O, C₆H₆, Me₂CO; EtOCH:CH₂-CH₂:CHO-
 Bu, 54, 0.9245, 1.4530, 0.7349, sol. as above; EtOCH:
 CH₂-CH₂:CHOAm-iso, 45, 0.9244, 1.4542, 0.8885, soly.
 as above; EtOCH:CH₂-CH₂:CHOC₂H₅, 43, 0.9233,
 1.4558, 0.8054, soly. as above; iso-PrOCH:CH₂-CH₂:
 CHOBu, 75, 0.9230, 1.4545, 0.7330, soly. as above but not
 sol. in EtOH; BuOCH:CH₂-CH₂:CHOC₂H₅, 79, 0.9260,
 1.4590, 0.8862, soly. as above but not sol. in EtOH and
 EtOH; BuOCH:CH₂-CH₂:CHOC₂H₅, 76, 0.9243, 1.4620,
 0.9595, soly. as above; iso-hexyl vinyl ether-CH₂:CHO-
 C₆H₅, 51, 0.9217, 1.4670, 0.8464, soly. as above but not
 sol. in alcs. below iso-AmOH; iso-AmOCH:CH₂-CH₂:
 CHOC₂H₅, 50, 0.9193, 1.4623, 0.8311, soly. as above;
 C₆H₅OCH:CH₂-CH₂:CHOC₂H₅, 59, 0.9231, 1.4657,
 0.8207, soly. as above but not sol. in alcs. below hexyl; du-
 OCH:CH₂-CH₂:CHOC₂H₅, 62, 0.9316, 1.4800, 0.8315,
 sol. in BuOH, Et₂O, and C₆H₆; BuOCH:CH₂-PhOCH:
 CH₂, 49, 0.9520, 1.5070, 0.7312, soly. not shown.
 G. M. Kosolapov

118

MIKHAILOV, B. I.

USSR.

✓ Ionic polymerization of vinyl ethers. M. F. Shostakov, B. I. Mikhailov, and N. N. Oechimukova. *Russ. Acad. Sci. U.S.S.R. Div. Chem. Sci.* 1953, 991-42 (Engl. translation).—See *C.A.* 49: 2309. H. L. H.

MIKHANT'YEV, B. I.

Ionic polymerization of vinyl ethers. M. P. Shostakovskii, B. I. Mikhant'ev, and N. N. Ovchinnikova (Inst. Org. Chem., Acad. Sci. U.S.S.R., Moscow). *Izv. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1953, 1056-60; cf. *C.A.* 48, 12669e. — α -DCH-CH₂ were polymerized by treatment with a trace of 5% FeCl₃·6H₂O in BuOH (vigorous reaction). The polymers, which were sol. in the usual org. solvents, had the following properties (% yield, d_4^{20} , n_D^{20} , and mol. wt., resp.; given): (R shown): *Ac*, 93, 0.9423, 1.4640, 2545; *Et*, 70, 0.9570, 1.4620, 6134; *Pr*, 83, 0.9308, 1.4523, 4830; *iso-Pr*, 61, 0.9368, 1.4520, 4580; *Bu*, 92, 0.9280, 1.4570, 4738; *iso-Bu*, 90, 0.9265, 1.4505, 4183; *iso-Am*, 86, 0.9117, 1.4607, 4048; *C₆H₁₁*, 89, 0.9129, 1.4632, 4003; *cyclohexyl*, 92, 0.9304, 1.4594, 1545; *C₇H₁₅*, —, 0.9132, 1.4651, 3069; *C₈H₁₇*, 89, 0.9230, 1.4607, 4263; *isooctyl*, 93, 0.9097, 1.4604, 3261; *C₁₀H₂₁*, 87, 0.9118, 1.4676, 3799; *C₁₁H₂₃*, 80, 0.9282, 1.4682, 5488.

G. M. Kosolapov

LFH

PM

SHOSTAKOVSKIY, M.F.; MIKHANT'YEV, B.I.; OVCHINNIKOVA, E.N.; NETERMAN, V.A.

Synthesis of incomplete acylals of lactic acid. *Zhur.ob.khim.* 23 no.7:
1167-1173 JI '53. (MLBA 6:7)

1. Institut organicheskoy khimii Akademii Nauk SSSR.
(Lactic acid) (Ethers)

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 211

Author: Mikhant'yev, B. I., and Sklyarov, V. A.

Institution: None

Title: Synthesis of 10-Vinylacridone

Original

Periodical: Zh. obshch. khimii, 1956, Vol 26, No 3, 784-785

Abstract: A mixture of 11 gms of acridone, 150 ml dioxane (or 250 ml C_6H_6) and 0.5 gm KOH is treated with acetylene at 180° and an initial pressure of 13 atm for 4-5 hours (see Favorskiy and Shostakovskiy, Zh. obshch. khimii, 1943, Vol 13, 1); 10-vinylacridone is obtained in yields of 92%, mp 181.5° (from alcohol or benzene). The structure of I was confirmed by its conversion to 10-ethylacridone (hydration over Ni at $\sim 20^\circ$ in dioxane; 94% yield).

Card 1/1

Михайлов, В. И.

Distr: 4E43/4E20(1)/4E3d

1. Allylacridones and their transformations. II. Preparation of 3-chloro-7-methoxy-10-allylacridone. B. I. Mikhailov and V. A. Bilyarov (State Univ., Voronezh). *Zhur. Dushchei Khim.* 21, 1697-8 (1967); *Cl. C.A.* 50, 14760h; *Druidy, C.A.* 32, 588. —Heating 80 g. 3-chloro-7-methoxyacridone in 250 ml. iso-BuOH in an autoclave with 5 g. powd. KOH and 18 atm. C₆H₆ 5-6 hrs. at 160-90° gave iso-BuOCH₂CH₂ and 95% 3-chloro-7-methoxy-10-allylacridone, m. 223° (EtOH). Reduction over Raney Ni gave the known 10-Br analog, m. 225°. G. M. K...

6
2 may
3
11

DM

PHILIPPOV, R. I.

AUTHORS: Philippov, R. I., Shustakov, V. P.

TITLE: Vinyl ether analogs of d-glucose and d-fructose and their polymerization.

PERIODICAL: Zhurnal Obshchei Khimii, 1977, Vol. 47, No. 11, p. 2311-2313 (USSR)

ABSTRACT: Quite a number of vinyl ether derivatives of monosaccharides and phenols of different structures were prepared. The polymerization of these compounds was carried out by A. Ya. Favorsky and M. P. Shustakov. As a result, the vinyl derivatives of α -D-glucopyranose and D-fructose were obtained. The polymerization of vinyl ether derivatives of these sugars failed. In the present work, attempts to polymerize vinyl derivatives of d-glucose and d-fructose. The polymeric products were obtained in yields of 10-15%. The stability of these polymers in their solvents (acetone and chloroform) was studied. The structure of d-glucose and d-fructose was determined from the IR spectra. The ^{13}C NMR spectra of these polymers were measured. The polymers were found to be soluble in acetone, chloroform, and other organic solvents. The results of the study of the polymerization of the vinyl derivatives of d-glucose and d-fructose are presented. The structure of the polymers was determined from the IR and ^{13}C NMR spectra. The polymers were found to be soluble in acetone, chloroform, and other organic solvents.

Card 1/2